

Draft for Discussion

# DIRECTOR'S REPORT

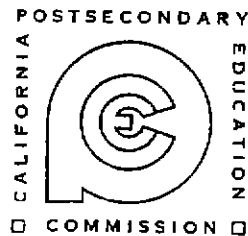
APRIL 1985

CALIFORNIA  
POSTSECONDARY  
EDUCATION  
COMMISSION



**DIRECTOR'S REPORT**  
**APRIL 1985**

**From Ninth Grade Through College:  
Student Paths Through High School and College  
In California**



**CALIFORNIA POSTSECONDARY EDUCATION COMMISSION**  
**1020 Twelfth Street, Sacramento, California 95814**

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## INTRODUCTION

California's three-tiered system of public higher education that resulted from the Master Plan clearly represents a singular social and cultural achievement. It has become the most widely respected and imitated model for public higher education in the nation; it has made possible one of the highest college participation rates of any state; and complemented by a large number of independent colleges and universities, it provides a degree of access and choice to its citizens unparalleled anywhere. The California State University, which traces its origin back to the creation of San Francisco's normal school in 1862, enrolled nearly 314,000 students on its 19 campuses in 1983-84. From modest beginnings in Oakland in 1868, the University of California has developed into a world-renowned nine-campus system enrolling some 141,000 students. And the California Community Colleges with their vast array of course offerings for diverse constituents, have grown to 106 colleges that provide a wide range of educational opportunities to more than 1.2 million people in 1983-84. Despite these achievements, problems of access as well as quality remain.

During 1983-84 and again in 1984-85, a number of factors contributed to sizable enrollment losses at the Community Colleges, particularly among first-time freshmen, young returning students, and Black and Hispanic youth. At California's independent institutions, the number of California first-time freshmen has also declined over the past five years, despite a slight increase in 1983-84. Of particular concern, the number of minority students enrolling at the University of California and the California State University has remained low, although it has increased in recent years, and the number graduating has not increased as fast as the number enrolling.

To provide perspective on these problems, this report looks at student paths through high school and college in California and the factors that influence students' enrollment behavior. It begins with the often difficult transition from eighth to ninth grade and traces the academic experiences of 1979-80 ninth graders in the public schools to see how many graduate from high school four years later and how many go on to college. It then examines the factors that influence decisions about whether or not to attend college and where to enroll. Finally, it describes patterns of attrition and transfer during the undergraduate years and the graduation rates of various groups of students.

## FROM NINTH GRADE THROUGH HIGH SCHOOL

In 1979-80, 335,209 young Californians entered the ninth grade in the State's public schools. Reflecting California's great ethnic and socio-economic diversity, they included 209,291 whites, 69,748 Hispanics, 34,936 Blacks, 13,667 Asians, 4,335 Filipinos, and 3,232 American Indians. Their families

ranged from wealthy to financially destitute and from long-time Californians to newly arrived Asian refugees and Hispanic immigrants.

Academic preparation for high school and later college or university attendance begins in the elementary schools, but most educators feel that the transition from elementary to junior high school is particularly critical and that the habits, interests, and attitudes toward schooling formed during the elementary and junior high school years largely shape subsequent success or failure. By the middle-school years, many students have already developed the reading and computational skills, study habits, self assurance, and support groups of family and friends needed to adjust successfully to the increasing demands of the junior high school years and make a smooth transition into high school. But others were not as fortunate. Simply the size and complexity of junior high can be confusing and intimidating to some. Coping with hundreds, if not thousands, of other students, changing classes and teachers six or seven times a day, balancing the multiple time demands of courses, remembering locker combinations, and keeping track of books and completing assignments, not to mention the other stresses accompanying the early teen years prove difficult for them. A number decide that school is not for them.

### Counseling and Curricular Tracking

The nature and quality of the counseling that students receive at the end of eighth grade to help them plan their courses for the ninth grade and beyond was quite important. So were the early outreach efforts designed by colleges and universities to urge ninth graders to consider college as a real option and to take the four-year sequence of courses required for entry into selective public and independent colleges and universities. Not all students are ready academically to benefit from such efforts, however, and many never enter the college-preparatory track.

These ninth graders found their high school curriculum was generally structured into three distinct patterns of courses or tracks. (1) a vocational track emphasizing job skills, (2) a general track for those who had not expressed an interest in higher education including remedial courses for those who were a grade or more behind their colleagues in reading and mathematics skills, and (3) a college-preparatory track that often includes honors courses for high-achieving students. For the most part, decisions about curricular placement are made at or before the time students begin the ninth grade, and have major implications for students' later education and career options since changing from the vocational or the general tracks to the college-preparatory track are increasingly difficult during the ensuing four years.

The past academic achievement of students and their performance on standardized tests measuring vocabulary, reading, and mathematics skills are most directly related to their assignment to different curricular tracks. According to a recent national study, over 72 percent of those rated high in academic ability were in the academic track in high school and less than 8 percent in the vocational track, but less than 14 percent of those rated low in academic ability were in the academic track, and 39 percent were enrolled in vocational courses.

Students' academic performance is also affected by parental education, family income, parents' occupations, and other socio-economic factors. For example, according to one recent national study, 62 percent of students from families rated high in terms of socio-economic status were enrolled in the academic or college-preparatory track, compared to just 21 percent from low-income disadvantaged families. Furthermore, among Black high school seniors in the class of 1980, 67 percent were enrolled in a non-academic track, as were 40 percent of Hispanic students. No comparable figures for California are available to the Postsecondary Education Commission, but from the Commission's 1983 High School Eligibility study it is evident that far fewer Black and Hispanic students enroll in college-preparatory courses in California high schools than do white or Asian students.

### Chances of Dropping Out

Almost one-third of California's ninth graders do not complete their high school studies or graduate with their class, according to the National Center for Educational Statistics. This percentage was four points higher than the national average of 28 percent in 1980-81. Data from the California State Department of Education indicate that only 254,944 young people graduated from California's public high schools in 1982-83, compared to the 335,209 who enrolled in ninth grade four years earlier, but this loss of 80,256 students over the four years -- a decline of 24 percent -- understates the magnitude of California's dropout problem in California for several reasons: The in-migration of many young people to California in the tenth, eleventh, and twelfth grades from other states as well as Asia, Mexico, Latin America, and other regions lowers the net losses implicit in these figures. Second, more private school students transfer into public high schools during these years than transfer from public to private schools. Third, at least some dropouts left school even before the ninth grade.

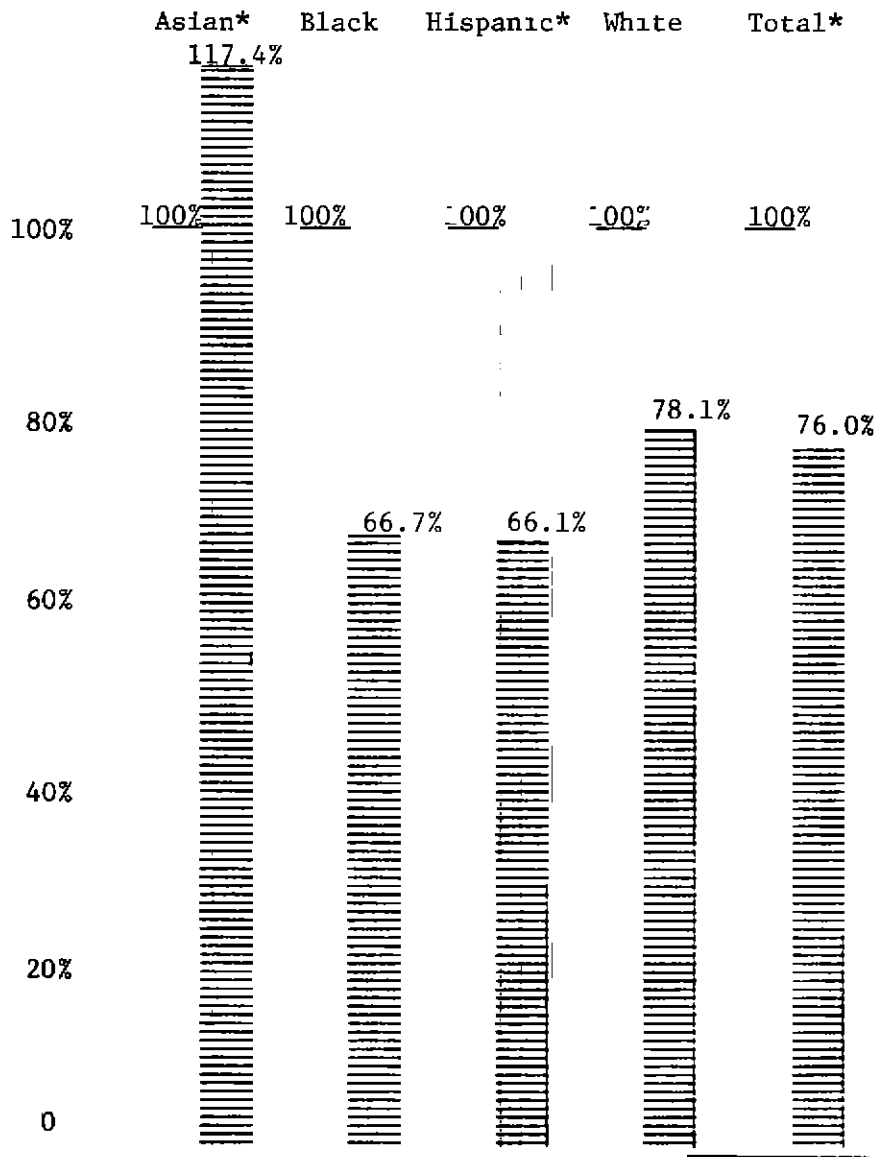
For some ethnic groups, the dropout rate is far higher than the average of 24 percent, as Display 1 shows: 40 percent among American Indian students, 33 percent for Black students, and at least 34 percent for Hispanic students, although their known in-migration suggests that their dropout rate is certainly higher than 34 percent. The dropout rate of Asian students is unknown because in-migration produced a 17 percent increase in Asian students over these four years.

Low-income and disadvantaged youth of all ethnic groups are disproportionately represented among the ranks of the dropouts, as are those whose parents and siblings have limited education, and those confronted with other family problems and the pressures in large inner-city schools. The most frequently cited characteristics of dropouts include:

- o Being held back a grade or more;
- o Reading two or more years below grade level;
- o Poor mathematics skills;
- o Little or no participation in school activities;
- o Social isolation;
- o Disruptive behavior in school, including trouble with rules or conflict with teachers and staff;



**DISPLAY 1 California High School Graduates in 1982-83 as a Percentage of California Ninth Graders in 1979-80, by Ethnicity**



\*The percentage that these high school graduates are of ninth graders is probably enlarged because of in-migration to California.

Source: California Postsecondary Education Commission staff analysis based on the California Basic Educational Data System of the California State Department of Education and the Commission's 1983 High School Eligibility Study.

- o Changing schools several times; and
- o Poor attendance.

The three critical periods when most dropouts decide to leave school are during junior high school, about age 16, and just before high school graduation. Some students never earn their high school diploma. Others decide to complete the high school courses in summer school, adult school, or a Community College, while still others complete their work through a GED program.

The consequences for society and for those dropouts who fail to earn a high school diploma through alternative means are quite serious. The unemployment rate for high school dropouts is two to three times higher than the rate for high school graduates. One recent national study found that only a third of young dropouts were employed and that those who were working could expect to earn 7 to 21 percent less per hour than high school graduates. Moreover, this earnings gap widens with age. Many dropouts end up on welfare. Nearly one third of California families receiving Aid for Families with Dependent Children (AFDC) have a head of household who did not complete high school, and the Rand Corporation found in 1976 that 99 percent of all California families headed by women who did not complete high school were receiving AFDC benefits. Moreover, a significant portion of the misdemeanor and felony arrests made in the State involve young people under the age of 20, while the median level of education of prisoners incarcerated in California's jails and prisons is the eighth grade.

## CHARACTERISTICS OF THE HIGH SCHOOL CLASS OF 1983

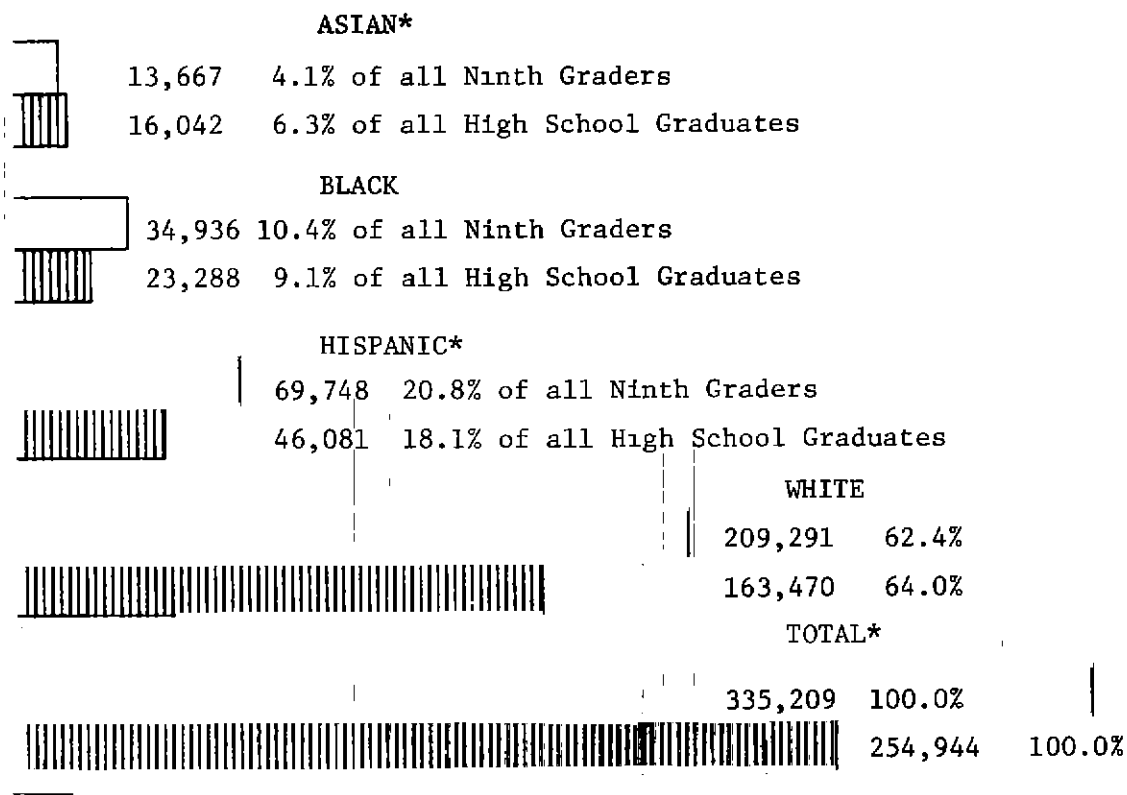
The effects of attrition in high school were evident in the composition of the class of 1983. Black graduates accounted for 9.1 percent of the total, compared to 10.4 percent of ninth graders four years earlier. Hispanics accounted for 18 percent of the graduates, compared to nearly 21 percent of the ninth graders in 1979-80. American Indian graduates made up 0.8 percent of the class, compared to 1.0 percent of the ninth graders. In contrast, Filipino, Asian, and white graduates formed a larger proportion of the graduating class than of ninth graders (Display 2).

Generally, high school graduates in the class of 1983 fell into one of three categories in terms of their eligibility for freshman admission to the State's public universities: (1) high-achieving students who were eligible for regular admission to the University of California, (2) above-average achievers who were eligible for admission only to the California State University, and (3) modest- to low-achieving graduates who were ineligible for regular admission to either the University or State University. The following sections first discuss eligibility requirements in these two segments and then the rates at which different groups achieve eligibility.

### Graduates Eligible for University Admission

To achieve eligibility for freshman admission to the University of California, high school graduates need either to (1) complete the required sequence of

**DISPLAY 2    Number of California Ninth Graders in 1979-80  
                  and High School Graduates in 1982-83, by Ethnicity**



\*The number of these high school graduates and their percentage of the total is probably enlarged because of in-migration to California.

Source: California Postsecondary Education Commission staff analysis based on the California Basic Educational Data System of the California State Department of Education and the Commission's 1983 High School Eligibility Study.

academic course work with a grade-point average of 3.3 or higher; (2) qualify for regular admission using a combination of test scores and grade-point averages between 2.78 and 3.29 in the required academic courses, or (3) score a total of at least 1,100 on the Scholastic Aptitude Test plus 1,650 on three College Board Achievement Tests with a minimum score of 500 on each of the three.

About one out of every seven graduates in the class of 1983 was ineligible for the University either because of failing to take one or more of the required courses or receiving less than a C grade in one of them, and three out of every four were ineligible because they were not enrolled in University-track courses in high school or had academic deficiencies in those courses they did take.

Overall, an estimated 13.2 percent of California's public high school graduates in 1983 completed all of the required courses and admissions tests at the level of competency required to be eligible for regular admission to the University. Among male graduates, 12.6 percent were eligible, or about one out of every eight male graduates, compared to 14.2 percent of female graduates, or approximately one out of every seven.

Among major ethnic groups, eligibility rates varied widely. Only 838, or 3.6 percent, of the State's 23,238 Black public high school graduates were eligible for regular admission to the University compared to 13.2 percent of all graduates. Just 2,258, or 4.9 percent, of the 43,823 Hispanic graduates completed all the requirements needed to be eligible for the University, as did 25,338, or 15.5 percent, of the 163,470 white graduates, and 4,171, or 26.0 percent, of the 16,043 Asian graduates (Display 3).

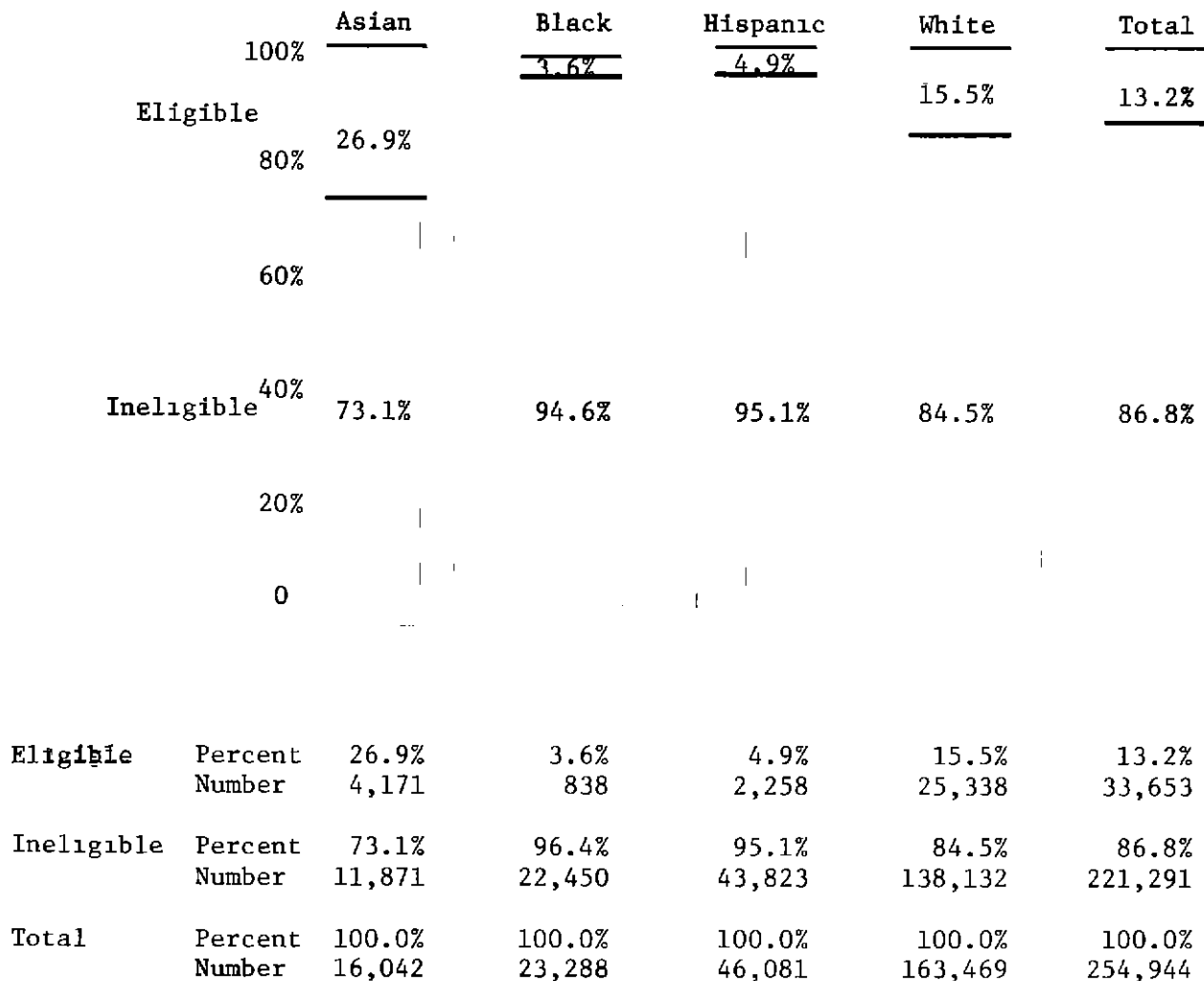
### Graduates Eligible for State University Admission

According to the Master Plan, the State University is supposed to admit only the top one-third of California's high school graduates. To achieve eligibility in 1983, graduates must either earn a cumulative grade-point average of more than 3.2 or score high on the SAT or ACT test if their grade-point average is between 2.0 and 3.2.

Overall, 29.2 percent of the class of 1983 were clearly eligible for admission to the State University, including the 13.2 percent eligible for regular admission to the University (Display 4). Thus, those above-average achievers eligible to attend only the State University comprised 16.0 percent of the class. Among male graduates, the eligibility rate was 13.8 percent, while among women it was 18.5 percent. Just 6.5 percent of the State's Black public high school graduates were eligible for regular admission only to the State University, compared to 10.4 percent of the Hispanic, 18 percent of white, and over 22 percent of Asian graduates.

There were also marked differences among major ethnic groups in the reasons for their ineligibility.

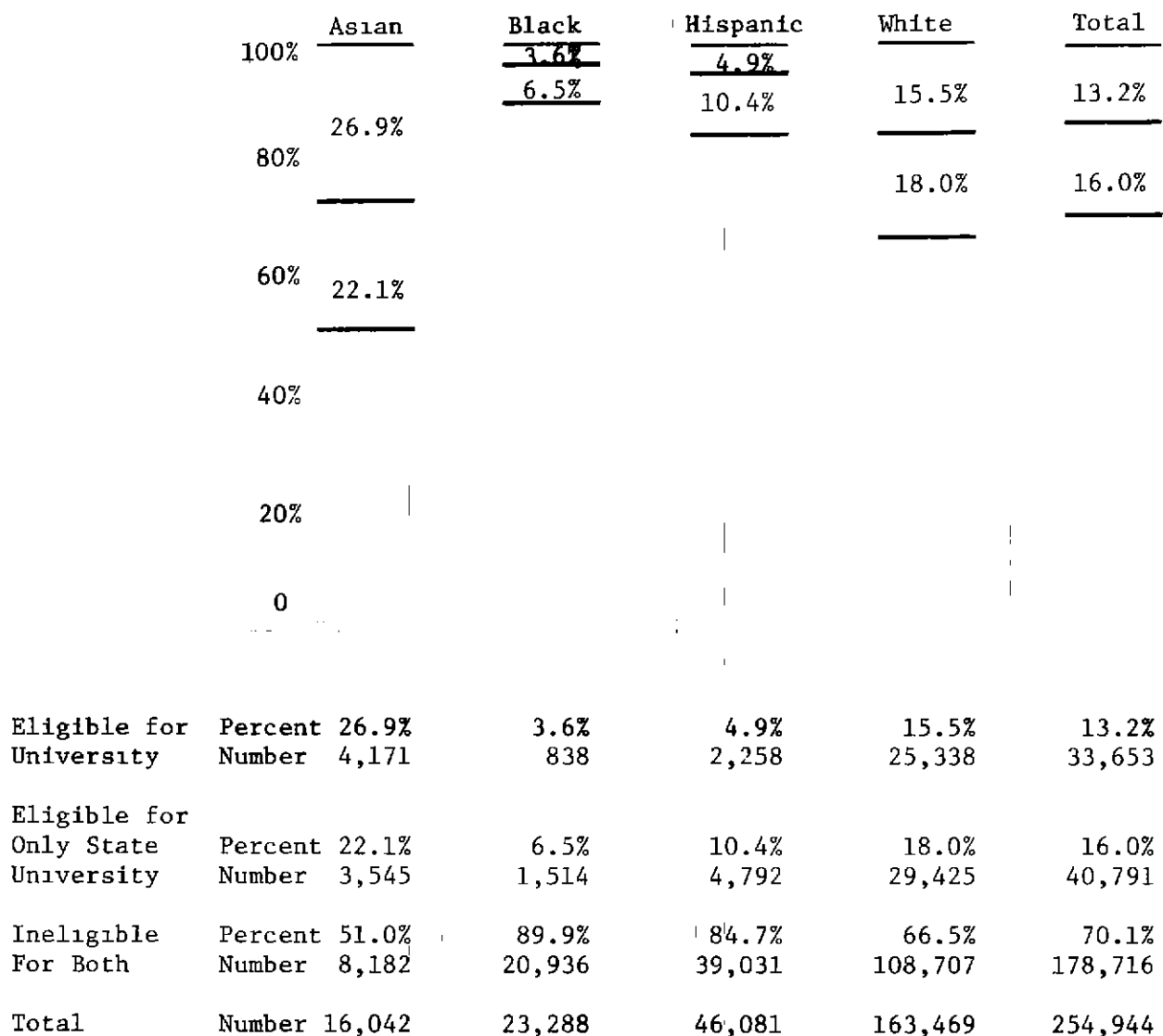
**DISPLAY 3 Percent of 1982-83 California Public High School Graduates Who Were Eligible or Ineligible for Regular Admission to the University of California in Fall 1983, by Ethnicity**



\*The number of American Indian and Filipino high school graduates in this sample is too small for statistically reliable estimates for the population of these graduates, but they are included in the total.

Source: California Postsecondary Education Commission staff analysis of data from the Commission's 1983 High School Eligibility Study.

**DISPLAY 4 Percent of 1982-83 California Public High School Graduates Who Were Eligible for Regular Admission to Only the California State University, Eligible for the University of California as Well, and Ineligible for Both in Fall 1983, by Ethnicity**



\*The number of American Indian and Filipino high school graduates in this sample is too small for statistically reliable estimates for the population of these graduates, but they are included in the total.

Source: California Postsecondary Education Commission staff analysis of data from the Commission's 1983 High School Eligibility Study.

- o Overall, 42 percent of the class had grade-point averages between 2.0 and 3.2 but were ineligible for regular admission to either of the four-year public segments because they failed to take the required tests needed to establish their eligibility. Over half of all Hispanic graduates possessed grade-point averages within this range, but failed to take the required tests.
- o An additional 11 percent of all graduates had grade-point averages between 2.0 and 3.2 and took the tests, but their combined scores were too low to qualify for regular admission to either the University or the State University. Over 18 percent of all Asian and more than 15 percent of all Black graduates were ineligible for this reason.
- o Finally, 17 percent of the class were ineligible because of extremely low grades and other subject-matter deficiencies in high school. Few Asian or white graduates were ineligible because of grade-point averages below 2.0, but more than one out of every four Hispanic graduates, and more than one out of every three Black graduates had grade-point averages this low.

## FACTORS AFFECTING COLLEGE ENROLLMENT

Five factors have been singled out as most significant in influencing both the probability that students attend college and their decision of what type of college to attend: (1) their academic achievement, (2) their families' income, (3) their parents' education, (4) the cost of attending particular institutions, and (5) institutional selectivity in admissions. Prior academic achievement and socio-economic characteristics have stronger effects on the probability of attending college than institutional costs or financial aid, but all these factors influence enrollment decisions.

### The Impact of Academic Achievement and Socio-Economic Status

A recent study by Manski and Wise of college choice in America found that the likelihood a student will apply for admission to a four-year college or university increases significantly with the student's high school class rank, SAT scores, parents' education, and, to a lesser extent, parents' income. These same factors also increase the likelihood of the student's actually enrolling.

Studies such as that one tend to hold all other factors equal while examining the importance of a particular factor such as SAT scores, but in the real world many of these factors are highly correlated. That is, a general relationship exists between high school class rank, grade-point average, and SAT scores on the one hand and socio-economic status on the other. Parental education and income, ethnicity, neighborhood, high school quality, and the characteristics of students' friends and peers are often closely related. As a result, the individual effects of certain factors on eligibility, applying for admission to a four-year institution, enrolling, dropping out, or earning a degree all tend to reinforce one another.

Not surprisingly, extremely high academic-achieving students, corresponding closely to those eligible for admission to the University of California, have the greatest range of higher education options available to them. Institutional selectivity and cost are factors in their decision, to be sure, but in general, the question for them is not whether to attend college, but which college to attend.

Above-average-achieving students, the group that generally corresponds to those eligible for regular admission to the State University, but not the University, also tend to be in the "which" rather than "whether" group, but their options tend to be more limited by institutional selectivity and other factors.

Low- and modest-achieving students naturally face the most restricted range of postsecondary options. While some of them have some choice, this group is for the most part limited initially to choosing either to attend college or enter the work force, a job-training program, or the armed services. Among high school dropouts, the only postsecondary options are adult schools, vocational training programs at proprietary institutions, or attendance at their local Community College. For many in this group, direct entry into the work force may appear to be the most attractive or viable option.

### The Impact of Cost

The one universal finding from studies of factors affecting enrollment is that the cost of attending a particular institution does affect access. Every study finds a significant, although small, negative relationship between the price faced by students and their probability of attendance. At the same time, the impact of price is not the same for all students at all institutions. First, students from low-income families are more affected by price changes than those from high-income families, although providing additional financial aid to low-income students can help offset these differences. Second, high-achieving students are less sensitive to changes in cost than other students, in part because they are quite likely to graduate. Third, the impact on enrollment of even a \$100 increase in costs at a low-priced college is much greater than it is at a high-priced institution. Fourth, price changes may lead to enrollment shifts between public and independent institutions or between segments within the public sphere.

Complicating these general relationships is the fact that at least two price systems in higher education affect student enrollment. The first one is the posted price -- the student's full cost of attendance, without considering financial aid. For example, it cost approximately \$2,900 for students in the class of 1983 to attend a California Community College, even though the Community Colleges charged no statewide mandatory fees in Fall 1983. It cost about \$4,900 to attend a State University, \$6,600 to go to the University, and around \$11,300 to enroll at an independent institution. These posted prices, including tuition and required fees, living costs, and books and supplies, have their greatest impact on students' application decisions because at the time students are trying to decide which institutions they are qualified to attend and can afford, they do not know whether they will qualify for financial aid or, if they do, how much aid they may receive.



Many students, however, do not actually pay the full posted price because they receive financial aid, and this net price has an impact on which institution students eventually decide to attend. The effectiveness of aid in offsetting college costs depends, in part, on the form of aid provided:

- o Grant assistance seems to be the most effective in offsetting college costs almost dollar for dollar among the most price responsive students -- those from low-income families.
- o Offers of work assistance, such as through the federal College Work Study program, are important but somewhat less effective in offsetting college costs. Moreover, while work assistance may promote persistence, the need to hold part-time jobs may slow students' academic progress by forcing them to reduce their unit loads. At the same time, however, it is a very attractive way to reduce the increasing reliance on loans and rising student indebtedness, especially if the jobs are closely related to the students' eventual careers.
- o Finally, Guaranteed Student Loans and other loans at below-market rates have played an increasingly important role in financing college education in recent years, but they appear somewhat less effective in offsetting college costs than either grant or work aid for low-income students.

The levels of student charges, overall college costs, and financial aid are all factors in either promoting or limiting access, choice, and educational quality, but they are not the only, or even the most important, factors influencing student enrollment decisions. They are the factors most readily influenced by public policy makers, but the other personal and institutional factors identified earlier more directly shape college going in California.

### The Impact of Institutional Selectivity

Those California high school graduates considering attending postsecondary education institutions have a wide range of choices available to them including the eight University of California campuses, 19 State University campuses, 106 Community Colleges, nearly 350 independent colleges and universities ranging from large comprehensive research universities to small liberal arts colleges, and from highly selective nationally prestigious institutions to relatively nonselective ones, and hundreds of proprietary and vocational training schools. In addition, perhaps 5 to 10 percent of California's high school graduates choose to attend out-of-state institutions ranging from public colleges and universities in neighboring states to elite eastern private colleges and universities.

The vast majority of graduates apply to only one college, generally schools in their immediate local area. Those who apply to two or more institutions tend to include large numbers of extremely high achievers, and they often apply to selective public and private institutions both in California and elsewhere.

The information of the actual enrollment behavior of California high school graduates in the class of 1983 comes from an initial follow-up survey sent to all the graduates in the Commission's eligibility study sample. Nearly

one-fourth of the 13,860 public high school graduates in the eligibility study sample responded to this first follow-up survey and reported whether they enrolled in college in Fall 1983, where they enrolled if they did, or what in general they did if they did not attend postsecondary education. The response rate was higher for University and State University eligible graduates, and there were probably more respondents among graduates attending some form of postsecondary education than among those engaged in other activities. Nevertheless, since the focus is on the range of choices made by the three eligibility groups rather than the resulting composition of particular segments' students, these data provide a preliminary look at the enrollment behavior of the class of 1983. A full study of this question would require a more complete follow-up survey, including information not only on the postsecondary choices of these graduates and their prior academic performance, but also on their families' financial circumstances, the schools to which they applied and those at which they were offered admission, the cost of attendance at the college or university they attended, where they lived while attending school, whether they worked while in school, whether they received financial aid, and a range of other factors.

### Enrollment Choices of High-Achieving Graduates

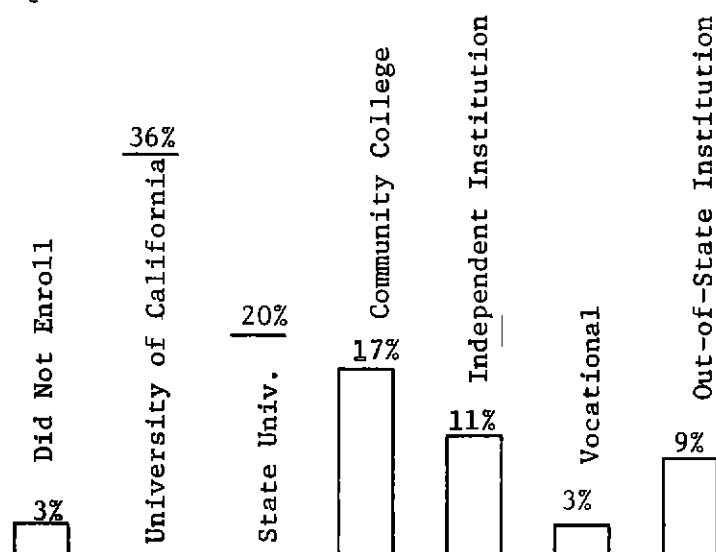
The 33,650 graduates of the class of 1983 who were eligible for regular admission to the University had the greatest range of postsecondary choices and were most likely to attend a selective four-year college or university. As Display 5 shows, less than 3 percent of the high-achieving graduates who responded to the first follow-up questionnaire reported that they did not enroll in college the fall term after high school graduation. Over 36 percent enrolled in the University of California, 20 percent enrolled in the California State University, 17 percent enrolled in Community Colleges, over 11 percent attended the State's independent institutions, 9 percent enrolled at an out-of-State institution, and the remaining 3 percent attended vocational or technical schools.

The sex of these high-achieving graduates seemed to make a difference in some of the postsecondary options they selected. For example, men accounted for nearly 60 percent of those who attended out-of-state institutions while women were disproportionately represented among those who enrolled in the State University, Community Colleges, or vocational schools.

Among major ethnic groups, the number of Black high-achieving respondents to the Commission's survey was quite limited, but these few students were more likely to enroll in the University of California than those from any other ethnic group except Asian students. High-achieving Hispanic students, on the other hand, were much more likely than any other ethnic group to enroll at a State University or a Community College, while Asian students were most likely to enroll at the University. High-achieving white students were the most mobile of all. While the largest group of them enrolled in the University, they were also represented among the full range of institutions and were slightly more likely to enroll in independent institutions or out of state than any other ethnic group.

Variations in the grade-point averages and SAT test scores of high-achieving graduates were also important factors in shaping the subsequent enrollment

**DISPLAY 5 Enrollment Choices of High-Achieving Graduates**



Source: California Postsecondary Education Commission staff analysis of data from the first follow-up survey of graduates in the Commission's 1983 High School Eligibility Study.

choices of this select group. Seven out of every ten of these high achievers in the follow-up sample who enrolled at independent colleges and universities in California had grade-point averages of 3.5 or better and the same percentage had total scores on the SAT test of 1,000 or more, including three out of every ten with total scores above 1,200. Clearly the highly selective, prestigious independent institutions were still able to compete successfully with the University and highly selective out-of-state institutions for California's high school graduates with outstanding academic records. In general, the out-of-state institutions attended by high achievers were among the most highly selective in the country, including Harvard, Yale, Princeton, Johns Hopkins, Chicago, and MIT. Furthermore, more than six out of every ten of these students who went to out-of-state institutions had at least a 3.5 high school grade-point average, nine out of ten scored 1,000 or better on the SAT, and nearly four in ten had SAT scores of at least 1,200.

Among the high achievers who enrolled at the University or in Community Colleges, a greater percentage had at least 3.5 grade-point averages than among those who enrolled at the State University. Moreover, twice as many of the high-achieving graduates in the follow-up sample enrolling in the University than in these other two public segments had SAT scores of 1,200 or above.

Comparing the enrollment behavior of these high-achieving graduates in 1983 with those in 1975 reveals two marked shifts -- an increase in the proportion

enrolling in out-of-state institutions and a drop from 23 percent to 17 percent in those enrolling in California Community Colleges.

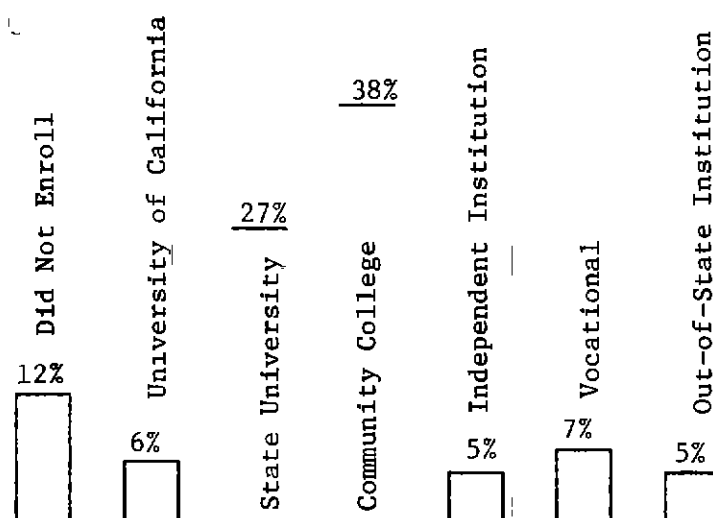
The proportion of high-achieving University-eligible students enrolling in the Community Colleges dropped during the past eight years, but the quality of those students who did so remained high judging from their high school grade-point averages and above average SAT scores. Nearly half of these high-achieving students in the follow-up sample attended 11 of the State's 106 Community Colleges suggesting that many of the State's Community Colleges now enroll few University-eligible students and that some of these colleges may have difficulty offering quality transfer programs if they do not enroll more high-achieving students.

### Enrollment Choices of Above-Average Achievers

Among graduates eligible for regular admission to the California State University but not the University of California, were a sizable number who took most of the high school courses required by the University, but who failed to complete one or more of the required courses or received grades and test scores that were not quite high enough to achieve University eligibility.

As with high-achieving graduates, the vast majority of these above-average achievers -- 88 percent -- attended some postsecondary institution in the fall term immediately following high school graduation. As Display 6 shows, over 6 percent of them enrolled at the University of California, presumably on a special-admission basis. More than 27 percent enrolled at one of the

**DISPLAY 6 Enrollment Choices of Above-Average Achievers**



Source: California Postsecondary Education Commission staff analysis of data from the first follow-up survey of graduates in the Commission's 1983 High School Eligibility Study.

State University's 19 campuses, and almost 38 percent attended Community Colleges. Less than 5 percent of them enrolled in California's independent institutions, 7 percent pursued vocational training, and 5 percent enrolled at out-of-state institutions that generally were not as selective as those attended by high achievers.

Women with above average high school records were somewhat more likely than men to enroll either in the University of California, in independent institutions, or in adult school. Men in this group were somewhat more likely than women to enroll in proprietary schools and in out-of-state institutions.

Among above-average achievers in the four major ethnic groups, minority students were more likely than white students to enroll at the University of California as special admits. White graduates were more likely than those in other ethnic groups to enroll in Community Colleges or in out-of-state institutions and somewhat less likely to enroll in the State University, although they still comprised a clear majority of State University freshmen. Black graduates in this group were more likely to enroll in the University as special admits, in the State University, and in proprietary institutions. Hispanic graduates, on the other hand, were less likely to enroll in the State University or in Community Colleges and significantly more likely to enroll in independent institutions or in vocational-training programs. Asian graduates were most often enrolled in the University, State University, and independent institutions, and least likely to attend Community Colleges or out-of-state institutions.

Again high school grades and SAT test scores of above-average achieving State University-eligible graduates were important factors in determining their subsequent enrollment choices. For example, nearly 75 percent of the State University-eligible graduates in the follow-up sample attending the University as special admits had grade-point averages of 3.0 or higher, although they had not taken all the required courses to qualify for regular admission to the University. On the other hand, fewer of the above-average achievers attending Community Colleges and the State University itself had grade-point averages that ranked them near the top of their graduating class. Furthermore, those attending independent institutions in California were not attending the highly selective institutions in that group, and those attending out-of-state institutions were generally attending other less selective state universities and independent institutions. About three out of every ten State University-eligible graduates scored 1,000 or above on their SAT exams. Here again, the percentage of above-average achievers with high test scores as well as high grades was greater among those enrolling in Community Colleges than among those enrolling in the State University -- the same pattern which characterized high-achieving graduates enrolling in these two segments as well.

Compared with 1975, the proportion of above-average achieving graduates in 1983 who did not enroll in postsecondary education the fall following high school remained unchanged at approximately 12 percent as did the approximately 5 percent enrolling at out-of-state institutions. The percentage enrolled in vocational training programs increased from 2 to 7 percent between 1975 and 1983, while the percentage enrolled at independent institutions dropped from 7 to 5 percent. On the other hand, the number of State University eligibles enrolled in the University increased from 3 percent to

6 percent, and the proportion enrolled in the State University itself jumped from 22 to 27 percent. At the same time, the proportion of State University-eligible graduates attending Community Colleges dropped a full 10 percentage points from 48 to 38 percent.

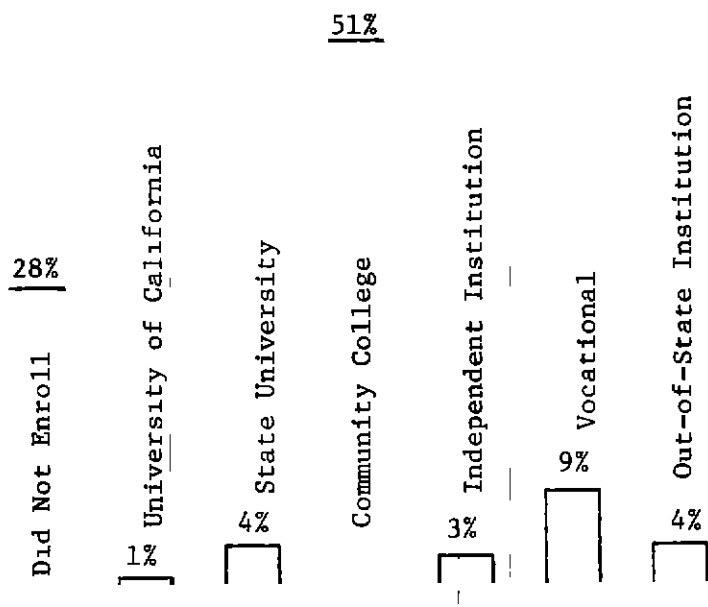
The proportion of above-average-achieving students enrolling in the Community Colleges dropped a full 10 percentage points between 1975 and 1983, although their quality remained fairly high, judging from their high school grade-point averages and their above average SAT scores.

### Enrollment Choices of Low and Modest Achievers

Those high school graduates ineligible for regular admission to either the University or State University accounted for 180,500 or seven out of every ten of the 254,944 members of the class of 1983. Four out of every ten of these graduates, or more than 107,300, were ineligible because they did not take the required admissions tests. An additional 28,000 had SAT test scores that were too low for regular admission, but the aspirations and plans of these modest achievers appear to set them apart from most other ineligible graduates, even if their high school academic records did not. Finally, over 45,100 had grade-point averages of less than 2.0.

Overall, among the low and modest achievers responding to the follow-up survey, nearly seven out of every ten enrolled in postsecondary education during the fall term following high school graduation, even though their grades and test scores limited the range of postsecondary options available to them. As Display 7 shows, less than 1 percent of them were granted special admission to the University, and 4 percent enrolled on the same

### DISPLAY 7 Enrollment Choices of Low and Modest Achievers



Source: California Postsecondary Education Commission staff analysis of data from the first follow-up survey of graduates in the Commission's 1983 High School Eligibility Study.

basis in the State University. Less than 4 percent attended independent institutions, and 4 percent enrolled out of state. Over half enrolled in California Community Colleges, and the remaining one in ten enrolled in vocational programs at either adult schools or proprietary institutions.

Men among these low and modest achievers were more likely than women to not enroll in postsecondary education, and they were also overrepresented among those granted special admission to the University and those enrolling at out-of-state institutions. Women, on the other hand, were more likely than these men to select vocational options.

Low- and modest-achieving minority students were more likely than white students to enroll at the University and State University as special admits, especially Black students at the University and State University and Hispanic students at the State University. In all instances, the Community Colleges were the institution where most low and modest achievers attending postsecondary education enrolled. White graduates were overrepresented only among those who did not enroll in postsecondary education at all in Fall 1983 and among those attending out-of-state institutions. Black low and modest achievers, in contrast, were significantly more likely to enroll somewhere and were well represented among those attending the University, State University, independent institutions, and out-of-state colleges and universities. Hispanic low and modest achievers were well represented among those enrolling in the State University, independent institutions, and vocational-training programs. Finally, Asians were the most likely to enroll and were particularly well represented among those attending public four-year institutions.

The vast majority of the low and modest achievers in the follow-up sample granted special admission status to enroll at either the University and State University had high school grade-point averages between 2.5 and 3.0 and SAT scores between 600 and 1,000. Most of these special admits to public four-year schools were among those modest achievers who had taken most if not all of the required academic courses in the college-preparatory track in high school and took the required sequence of admissions exams, but their combined grades and test scores were insufficient to secure regular admission to these public four-year institutions and significantly below those of even the bottom 10 percent of regularly admitted students at the University. Almost none of the low achievers with grade-point averages below a 2.0 in high school were accepted as special admits.

Not only did the proportion of low and modest achievers enrolling in the Community Colleges drop slightly between 1975 and 1983, but the academic ability of those who did enroll was noticeably lower than among those specially admitted to four-year institutions. A substantially larger proportion of low and modest achievers enrolling in Community Colleges in 1983 than 1975 had grade-point averages below 2.5, and these colleges were the only ones enrolling significant numbers of graduates with grade-point averages below 2.0. The large number of students whose academic preparation and performance in high school was weak as well as students over 18 years of age who failed to graduate from high school helps account for the increasing demands on these colleges to provide remedial instruction at the same time they seek to offer quality transfer and vocational programs to the decreasing number of University and State University eligibles who enroll in them and to the low- and modest-achieving students who want to achieve eligibility to transfer to the University or State University.

## Activities of Graduates Who Did Not Attend College

Less than 3 percent of high-achieving graduates, 12 percent of above-average achievers, and at least 28 percent of low and modest achievers in the class of 1983 who responded to the Commission's follow-up survey did not enroll in postsecondary education during the fall term following high school graduation. The actual figures are undoubtedly higher, particularly among low- and modest-achieving graduates because those not attending postsecondary education were less likely to respond to the follow-up survey.

The vast majority of these graduates were employed either full or parttime. Nearly six out of every ten of the men and two-thirds of the women in this group were working. About 3 percent were engaged in some form of job training, while an additional 16 percent were seeking work but were currently unemployed. Among the men, one out of seven had enlisted in the military, but perhaps not surprisingly very few of the women reported doing so. Finally, about 5 percent of the men and nearly 11 percent of the women indicated that they were involved in some other activity, such as volunteer work, travel, or homemaking.

The small number of high-achieving University-eligible men in this group had the lowest percentage working, below average numbers were unemployed, and an above average percentage enlisting in the military or engaged in other activities. Eight out of every 10 high-achieving women were employed, and the rest were unemployed but looking for work.

Over half of the above-average-achieving men in this group were working, barely one in 10 was unemployed or receiving job training, and approximately one-fourth were enlisted in the armed services. Nearly two-thirds of the above-average-achieving women were working, and most of the others were evenly divided between the unemployed and those engaged in other activities.

Low- and modest-achieving graduates were much less likely than others to attend postsecondary education after graduation. Nearly 60 percent of the men and almost 66 percent of the women who were low and modest achievers and out of school were working full or parttime during the year following graduation, and both the men and women in the ineligible group had above-average unemployment rates. Nevertheless, the 16 to 18 percent unemployment rates among all these high school graduates were well below the statewide unemployment rate of 21 percent in September 1983 for all California youth between 16 and 19 years of age. Of course, this latter group included many junior high and high school dropouts, not just high school graduates from the class of 1983, and the unemployment rate among dropouts is generally higher than among high school graduates.

Some of these graduates who decided to work or engage in other activities following high school rather than to enroll in postsecondary education will eventually attend some California college or university. Most will enroll at a Community College, judging from the age of first-time freshmen in the three public segments of higher education in 1983. That fall, over 99 percent of the University's first-time freshmen from California high schools were aged 19 or under, as were over 96 percent of those enrolling in the State University. Most of the others, moreover, were in their early twenties.



On the other hand, just 67 percent of the Community Colleges' first-time freshmen from California high schools and only 51 percent of all their first-time freshmen who had never previously enrolled in any college were 19 years of age or younger. Overall, nearly three out of every ten Community College first-time freshmen were in their twenties when they first enrolled, an additional one in ten were in their thirties, and another one in ten were 40 years of age or more.

One of the unique contributions of the California Community Colleges to access and educational opportunity in California is its open-admission policy and its service to young and old Californians who seek to continue their education or enhance their job skills. Furthermore, these same enrollment data make clear that these colleges provide an important educational point of entry not only to large numbers of ethnic minority and low-income California residents, but for many others migrating to California from elsewhere in the country or the world. For example, 94 percent of the more than 1,700 Asian first-time freshmen in their thirties enrolling in Community Colleges in Fall 1983 did not graduate from California high schools. Most were presumably either refugees from southeast Asia or immigrants from overseas.

#### CHARACTERISTICS OF FIRST-TIME FRESHMEN FROM THE CLASS OF 1983

Of California's 262,160 public and private high school graduates in 1983, 18,323 enrolled on either a regular or special-admission basis in the University of California that fall; 23,250 were admitted to the State University; 98,390 attended California's Community Colleges; 8,914 attended independent institutions; slightly more than 5 percent enrolled in out-of-state institutions; and 6 percent appear to have enrolled in vocational programs at proprietary schools or adult schools within California. These figures suggest that nearly 178,000 young Californians attended some postsecondary institution immediately following high school graduation, while more than 84,000 did not.

Table 1 compares the ethnic composition of public high school graduates with the ethnic composition of University- and State University-eligible graduates and of first-time freshmen enrolled in California's three public segments in Fall 1983.

#### University of California First-Time Freshmen

The University's first-time freshman enrollment shows the combined impact of the low rate at which Black and Hispanic high school graduates attain eligibility for regular admission, the wide range of educational options available to high-achieving students, and the effects of the University's special-admission policy for low-income disadvantaged students who are otherwise ineligible to attend.

Only 838 of the nearly 23,300 Black public high school graduates in 1983 were eligible for regular admission to the University, and some of these

**TABLE 1 Ethnicity of Public High School Graduates, University and State University Eligibles, and First-Time Freshmen Enrolled in California's Public Segments in Fall 1983**

<u>Ethnic Group</u>	<u>Public High School Graduates</u>	<u>University of California Eligibles</u>	<u>University of California First-Time Freshmen</u>	<u>California State University Eligibles</u>	<u>California State University First-Time Freshmen</u>	<u>Community College First-Time Freshmen</u>
Asian	16,042 6 3%	4,171 12 4%	2,994 17 3%	3,545 8 7%	2,493 11 5%	5,192 5 6%
Black	23,288 9 1	838 2 5%	882 5 1	1,514 3 7	1,566 7 2	9,165 9 9
Hispanic	46,081 18 1	2,258 6 7	1,355 7 4	4,792 11 7	2,508 11 6	13,846 15 0
White	163,470 64 1	25,338 75 3	11,473 66 5	29,425 72 1	14,313 66 1	60,525 65 7
Total	254,944	33,653	18,323	40,791	23,250	98,390

Note. Totals for the four ethnic groups do not sum to total figure because American Indian and Filipino students are not listed separately, but are included in the totals.

Source: California Postsecondary Education Commission 1983 High School Eligibility Study.

highly qualified Black graduates enrolled in other California colleges and universities and in out-of-state institutions. Approximately 44 percent of all high-achieving Black graduates enrolled in the University -- a percentage second only to that of Asian high achievers. Nevertheless, more than half of the 882 Black first-time freshmen at the University in Fall 1983 were special-admission students.

Less than one-third of the small number of high-achieving Hispanic graduates actually enrolled in the University -- the lowest rate for any ethnic group -- and over 45 percent of the University's Hispanic first-time freshmen were special admits. In contrast, more than 60 percent of the Asian graduates eligible to attend the University actually enrolled, and few of the Asian first-time freshmen were special admits. About 35 percent of white University eligibles actually enrolled, and virtually none did so on a special-admission basis.

As noted earlier, some of the special admission students at the University were State University-eligible graduates with above-average high school grades. Nearly 75 percent of those State University-eligible students in the follow-up survey who enrolled at the University had high school grade-point averages of 3.0 or better. Although fewer special-admission students were at the top of the grade-point range and most had lower SAT scores than regular admission students, they were for the most part drawn from the ranks of above-average graduates, and the vast majority of them appear to have taken most, although not all, of the University's required preparatory courses.

## California State University First-Time Freshmen

A high percentage of Black and Asian graduates enrolled as first-time freshmen in the State University, in terms of their proportions of the State University's eligibility pool, while Hispanic students enrolled in about the same proportion, and white students enrolled in substantially lower proportions. For instance, Black first-time freshmen accounted for 7.2 percent of all State University first-time freshmen but only 3.7 percent of the State University's eligibility pool. Asian students accounted for 11.5 percent of the first-time freshmen but only 8.7 percent of the State University's eligibility pool, whereas white students comprised 66.1 percent of the first-time freshmen but 72.1 percent of this eligibility pool. Some of these State University freshmen were eligible for University admission but chose to attend the State University instead of the University. Among Black and Hispanic State University first-time freshmen, however, a clear majority were special-admission students. Some of them had fairly solid academic records in high school, but the majority had grade-point averages between 2.0 and 2.9 and either had not taken the required tests or had taken them and scored too low to qualify for regular admission. A clear majority of the State University special-admission students in the follow-up survey who took the SAT exams, for example, had combined scores between 600 and 800 -- compared to the statewide average score of 897 for all California test takers, and very few of the specially admitted students had scores of 1,000 or more.

## Community College First-Time Freshmen

Of all three public segments, the ethnic composition of first-time freshman enrollment in the Community Colleges most closely approximated the composition of California's 1983 high school graduating class. Asians and Hispanics were slightly underrepresented among their first-time freshmen, while American Indian, Black, Filipino, and white students were slightly overrepresented, compared to their numbers among 1983 high school graduates.

Community College students ran the entire gamut of academic ability from University-eligible students with outstanding high school grade-point averages and good SAT scores to high school graduates with less than a 2.0 grade-point average and a sizable number of high school dropouts.

They ranged from 18- and 19-year old first-time freshmen just out of high school to students in their thirties or forties, including large numbers of people who have moved to California from other states and countries and are now enrolling in postsecondary education for the first time. Indeed, two-thirds of all first-time Community College freshmen graduating from California high schools and just half of all Community College first-time freshmen were aged 19 or under; the rest were older students. Large numbers of them were unprepared to begin college-level work immediately, and others who were returning to formal education again after long absences faced difficult adjustments in their return to the classroom.

## Freshman Preparation and Remediation

The degree of preparation of new freshmen for college-level work is a major factor in their subsequent college performance and their likelihood of graduation. While eligibility for regular admission is an indicator of prior academic performance, an increasingly large portion of both regularly and specially admitted undergraduates in all three public segments require remedial course work in reading, writing, or mathematics before they are fully ready to successfully undertake their collegiate course work.

Remedial Instruction in the University: According to the Commission's 1981 report on remediation, Promises to Keep, over half of all new freshmen at the University of California in 1979-80 had to enroll in Subject A or equivalent courses to improve their basic writing proficiency. In that year, more than 11,000 University students were enrolled in remedial reading and writing courses, accounting for 16 percent of total enrollments in English courses. There were also 7,490 enrollments in remedial mathematics courses, representing 9 percent of all enrollments in University mathematics courses in 1979-80. While no definitive figures are available on the extent of the University's remedial instruction in 1983, there is no reason to believe that the problem is any less severe now than it was four years ago.

Remedial Instruction in the State University: Nearly half of the State University students taking their English Placement Test need remedial assistance before entering freshman composition courses. In 1979-80, the State University enrolled 10,539 students in remedial reading and writing courses, and the number jumped to 13,266 the following year -- accounting for 8 and 10 percent of all English course enrollments, respectively. The State University also provided remedial mathematics instruction to 15,790 students in 1979-80, and 18,327 the next year, accounting for one out of every seven students enrolled in math courses in each of these years.

Remedial Instruction in the Community Colleges: Nowhere is the diversity of students and the range of academic preparation more evident than in the Community Colleges. The 101 colleges responding to the Commission's 1981 survey indicated that they had 211,845 enrollments in remedial reading and writing courses in 1980-81 and that these accounted for 45 percent of their total enrollments in English courses that year. This corresponds fairly closely to national data indicating that about 40 percent of all English enrollments in Community Colleges are in remedial reading or writing courses. The California Community Colleges also reported that they had 200,925 enrollments in remedial mathematics courses in 1980-81, and that these comprised 57 percent of their total mathematics enrollments. Again, no more recent figures are available for the class of 1983, but the available evidence suggests that in Fall 1983 remedial courses still accounted for a major portion, if not a majority, of all Community College enrollments in reading, writing, and mathematics courses.

## FROM COLLEGE FRESHMEN TO FOUR-YEAR COLLEGE GRADUATES

Enrollment in either a two- or four-year postsecondary education is the first step toward realizing the promise of access to higher education in

California, but a large portion of those who enroll in higher education never graduate. According to the National Center for Education Statistics, about half of those enrolling in four-year colleges nationally drop out before earning a bachelor's degree. The rate is even higher in two-year colleges throughout the country, in part because of the diverse abilities and circumstances of their students but also because some of the younger students attending Community Colleges transfer before securing an A.A degree and many adult students enroll to take courses and have no intention of getting a degree. California can be justifiably proud of its high rank among the states in terms of participation in postsecondary education, but it does not rank nearly so high in terms of the number of students earning bachelor's degrees.

### Retention and Graduation at the University

If those members of the class of 1983 entering the University are similar to their counterparts in earlier years, approximately 60 out of every 100 first-time freshmen will earn a bachelor's degree somewhere in the system within five years. The rates vary from 53 out of every 100 at Santa Cruz to 67 out of every 100 at Berkeley and Davis, although some of the graduates at the larger campuses actually began their University educations at smaller campuses in the system. In addition, approximately 10 out of every 40 who do not receive a degree within five years will earn their University degree at a later time, and another 10 will eventually earn a degree at some other college or university.

The overall 80 percent graduation rate at the University for regularly admitted students is much higher than the national average for public four-year institutions but similar to the persistence and graduation rates found at other highly selective private universities. If the 5 to 6 percent of all University first-time freshmen who are special-admission students were included in these figures, the University's persistence and graduation rates would be slightly lower because these students are somewhat less likely than regularly admitted students to continue beyond the first year and less likely to graduate.

### Retention and Graduation at the State University

The State University has tracked two groups of first-time freshmen -- those who enrolled in its 19 campuses in Fall 1973 and those who did so in Fall 1978. Of all first-time freshmen who enrolled in the State University in Fall 1978, 72 percent were still enrolled in Fall 1979, nearly 26 percent earned a degree by Fall 1983, and an additional 18 percent were still enrolled as undergraduates that year. Compared with the entering freshmen in Fall 1973, the Fall 1978 group were slightly more likely to persist within the State University, but somewhat less likely to earn a degree within five years, since 30 percent of the Fall 1973 group had graduated within five years. Some of the students who dropped out of the State University probably enrolled in other public or independent institutions and some of these may have eventually graduated from college, but others clearly did not.

Nearly 74 percent of all regularly admitted State University freshmen in 1978 were still enrolled one year later; 62 percent were still enrolled after two years; and 29 percent of these first-time freshmen graduated within five years. These persistence rates were somewhat lower than the comparable rates for regularly admitted State University students in Fall 1973, and fewer of the Fall 1978 group were progressing as rapidly toward completing their degrees, since 33 percent of the Fall 1973 group graduated within five years. The most recent State University continuation and graduation rates for regular admission students are also substantially lower than those of the University and below the national average for students at public four-year institutions, despite the fact that the State University is more selective than most public four-year institutions in other states.

Attrition and graduation rates at the State University varies slightly between men and women, but the greatest differences are between students who were regularly and specially admitted. Among specially admitted first-time freshmen in Fall 1978, less than 65 percent were still enrolled after one year, less than 46 percent were enrolled after two years, and further losses continued to occur among those who remained, averaging nearly 20 percent per year for the next three years. After five years, less than 25 percent of the specially admitted State University students were still being tracked. Exactly 17 percent were still enrolled as undergraduates, and less than 8 percent -- or fewer than one out of every twelve who began as first-time freshmen five years earlier -- had graduated. While comparisons with the earlier Fall 1973 special-admission students indicate that persistence in the first and subsequent years has improved somewhat the already low five-year graduation rate of 10 percent for the Fall 1973 group has dropped further.

These special-admission students include 50 to 60 percent of all the Black and Hispanic first-time freshmen enrolled in the State University in Fall 1978. If similar patterns of persistence and graduation hold for those entering the State University from the class of 1983, its graduation rates of underrepresented low-income and ethnic minority students are likely to remain below those for Asians and whites in the near future.

### Transfer of Community College Students to Four-Year Institutions

Some of the nearly 100,000 members of the class of 1983 who enrolled in Community Colleges in the fall following graduation will eventually complete part or all of their lower-division academic work at those colleges before transferring to four-year institutions to complete their baccalaureate degrees. The transfer function is a cornerstone of California's Master Plan for higher education, and strengthening it is critical to the State's ability to increase the number of low-income and disadvantaged young people who traditionally begin their college careers in the Community Colleges

In all, 37.9 percent of California's public and private high school graduates 19 years of age or younger enrolled in Fall 1983 in one of the State's 106 Community Colleges. There were at least four sub-groups of these first-time freshmen: (1) those eligible to enroll at the University of California on the basis of their high school record; (2) those eligible to enroll at the State University but not the University directly out of high school; (3)

those who were ineligible because of minor subject deficiencies out of high school for regular admission to the University or State University; and (4) those with major deficiencies in preparation or level of performance.

The relative size of these four sub-groups within the Community Colleges' first-time freshmen enrollment provides an important clue about the size of the potential pool of transfer students in future years, but three trends since 1976 have all served to reduce the size of this potential pool:

- o The number of high school graduates has dropped from 289,454 in 1976 to 262,160 in 1983 -- a decline of 9 percent.
- o For a variety of reasons, the number of graduates who achieve eligibility for both the University and State University have dropped in these same years from 14.5 percent to 13.2 percent eligible for regular admission to the University and from 20.5 percent to 16.0 percent eligible for regular admission to the State University but not the University.
- o As noted earlier, the percentage of high-achieving students attending Community Colleges appears to have dropped from 23 percent in 1976 to 17 percent in 1983, and the number of State University-eligible students enrolling first in Community Colleges has dropped from 49 percent to 39 percent in these same years.

The net effect of these three changes has been a nearly 40 percent reduction in the number of University-eligible graduates attending Community Colleges directly out of high school and a 45 percent reduction in the number of State University-eligible graduates attending these colleges between 1975 and 1983. Together, these students represented one out of every three first-time freshmen aged 19 and under in the Community Colleges in 1976, but they now account for barely one in five.

While these two groups of young freshmen are among those most likely to eventually transfer to four-year institutions, a significant element of the Community College transfer function is to remedy the subject-matter and performance deficiencies of students who seek to transfer but who were ineligible for regular freshmen admission to the University and State University at graduation. About 70 percent of the students who transfer to the University with freshman or sophomore standing were ineligible to attend directly out of high school, while the other 30 percent are students who were eligible for regular admission but attended a Community College first. The number of eventual transfer students to the State University who were originally ineligible for admission is not known at this time, but again a large number of Community College transfers appear to come from among those originally ineligible to attend the State University after high school graduation.

The total number of transfer students each year from Community Colleges to public four-year institutions and their subsequent persistence and performance at four-year institutions is the one common measure of the health of the transfer function. Over the last eight years, the number of transfer students had declined markedly from 7,123 transfers to the University in 1976 to 5,305 in 1983, and from 32,653 Community College transfers to the State University in the former year to 30,274 in the latter.

The changes that have occurred in these same years in the composition of the Community Colleges' first-time freshman class, together with the substantial decline in the number of first-time freshmen in both Fall 1983 and Fall 1984 indicate that the recent upturn in transfers may prove temporary and that further declines in the number of transfer students may be likely in the near future.

Information on the persistence, performance, and graduation rates of Community College transfer students is somewhat sketchy, but several general patterns are clear. In both the University and State University, the greatest attrition of transfer students occurs in their first year after transfer, suggesting that so-called transfer shock is similar in its origins to the sometimes difficult adjustments freshmen must make in their first year of collegiate life.

Retention and Graduation of Transfer Students at the University: The only available data on the persistence of Community College transfers in the University are somewhat dated. Nonetheless, they show that between 20 and 30 percent of these students leave either during or immediately following their first year at the University and that about one-half of those who depart are having academic difficulties at the time they leave.

The Community College transfer students who persist earn slightly lower grades on average in their first year of upper-division work at the University than junior-level students who began their college careers as freshmen there, but the vast majority earn high enough grades to maintain good academic standing. On the other hand, the grade-point average gap between transfer and native students was greater for transfers who were ineligible out of high school than for those who had been eligible for regular admission as freshmen.

By the end of their second year at the University, the upper-division grades earned by Community College transfers who were eligible from high school improved from 2.9 to 3.0 and the grade-point average gap between them and native freshmen narrowed further. Both were nearly as likely to graduate at the same time. While the grades earned by transfer students who were originally ineligible for regular admission in high school improved from 2.6 to 2.8 between their first and second year after transfer, they were 25 percent less likely to graduate on time than either of the other two groups of University students.

Retention and Graduation of Transfer Students at the State University: The vast majority of all Community College students who transfer to a four-year college or university in California enroll in the State University. Of the more than 45,000 transfer students who enter the State University each year, approximately 70 percent are still enrolled somewhere within that system the following year. This is nearly the same percentage persisting to the second year as for first-time freshmen within the State University. Nearly half of all these Community College transfer students are still enrolled after two years, and about one out of every three graduates within three years after transfer. Not only is this 34 percent three-year graduation rate for transfers to the State University well below the comparable rate for transfers to the University, it is also below the 50 percent rate for State University students who begin as freshmen within that system and persist to their junior year.



Based on recent systemwide reporting by the State University, the differential between Community College and State University grade-point averages is smaller than that found for transfers to the University and may be close to zero. One explanation may lie in the nature of the competition for upper-division grades at the two segments, in that transfer students to the University are competing with a highly selected native-student population that has persisted to the junior level, while State University transfers are competing largely among themselves since native students comprise at most about half of all State University students at the upper-division level.

## CHARACTERISTICS OF UNIVERSITY AND STATE UNIVERSITY GRADUATES

In 1982-83, students who had attended Community Colleges earned 21 percent of the University's 21,328 baccalaureate degrees and 50 percent of the State University's 42,959 baccalaureate degrees. These percentages are only approximations of the number of degrees awarded to Community College transfer students, since many of these degree recipients enrolled at several institutions en route to the degree and may have spent only a short time in a Community College. Still, they compare favorably with the percentages of native students who enrolled directly from high school and were awarded 53 percent of the University's and 34 percent of the State University's baccalaureate degrees. Transfers between these two segments accounted for 5 percent of the University's and 3 percent of the State University's degrees; and transfers from other types of institutions accounted for the remaining 21 and 13 percent, respectively.

Because of the widely differing attrition rates within each segment, especially the attrition and graduation rates for students from different ethnic groups and for those who were regularly instead of specially admitted, the ethnic composition of the graduating class differs substantially from that of the entering freshmen or of transfer students. About six out of every ten regularly admitted freshmen in the University graduate within five years, compared to one out of every five or six special-action disadvantaged students. In the State University, only about one out of every four regularly admitted freshmen graduate within five years, although four in ten may eventually graduate. But among specially admitted first-time freshmen, less than one in twelve graduates within five years, and probably no more than one in six ever earns a State University baccalaureate degree.

In the University, at least 60 percent of Community College transfer students earn their baccalaureate degrees, compared to 75 percent of native freshmen who persist to their junior year. In the State University, the comparable percentages are 34 percent and 50 percent, respectively.

White students entering as freshmen are much more likely to graduate than Black or Hispanic students, and Asian freshmen in both segments are more likely to persist and graduate within five years than any other group. One University study showed that approximately 51 percent of its white first-time freshmen graduated within five years, compared to 40 percent of its Hispanic first-time freshmen, 38 percent of its Black freshmen, and 66 percent of its Asian students. Some of the others graduate in more than

five years, but the relative success rates of the various ethnic groups appear to hold beyond this point.

In the State University, the five-year graduation rates for first-time freshmen entering in Fall 1973 were 34 percent for white students, 16 percent for Hispanic students, 14 percent for Black students, and 34 percent for Asian freshmen. The substantially lower five-year graduation rate for Black and Hispanic students in the State University than for white and Asian students reflects in part the very low graduation rate for specially admitted students who comprise more than half of all first-time freshmen from these two ethnic groups. Among Community College transfer students to the State University, the three-year graduation rates appear higher at first glance, but are in fact one-third lower than for freshman students who persist to their junior year. Approximately 38 percent of the white transfer students, 28 percent of the Hispanic students, 21 percent of the Black students, and 36 percent of the Asian transfer students graduate within three years from a State University campus.

## STUDENT FLOW THROUGH HIGH SCHOOL AND COLLEGE IN CALIFORNIA

The previous pages have indicated that after more than a century of commitment to access and educational opportunity at high quality public and independent institutions in California, substantial disparities continue in the academic achievement and educational attainment of different groups of students within California. Parents' education, occupations, family income, cultural attitudes, and the educational institutions themselves all play major roles in the subsequent academic achievement of young Californians, the degree to which they appear to avail themselves of the considerable educational opportunities available, and attendance and relative success in postsecondary education. Efforts to more adequately fund education at all levels, except the Community Colleges, after years of tight budgets and reduced funding in constant dollars, as well as attempts to reform and strengthen the quality of education and student performance in grades K through 12 in the public schools, are still too recent to have had much impact yet on patterns that have been developing over decades. Over 80 percent of the Hispanic third grade students in California public schools are already reading below grade level. Such gaps in the rate of learning and academic achievement show up early in the elementary school years and tend to widen more in ensuing years. Special outreach activities and special admission, affirmative action, educational opportunity, and financial aid programs have contributed to the gains that have occurred in minority enrollments in postsecondary education in recent years. Nevertheless, the Black, Hispanic, and American Indian students are still more likely to drop out of school before graduating from high school than are white or Asian students. Students from these same three ethnic groups were much more likely to come from low-income families, have parents with limited formal educations, and attend inner-city schools with serious problems than were most of their white and some of their Asian counterparts. Black and Hispanic students were more likely to be enrolled in the remedial, vocational, or general education tracks in high school than white or Asian students, and considerably less likely to be enrolled in college-preparatory courses, particularly those required for entry into the

University of California. Not only do fewer Black and Hispanic students qualify for regular admission to either the University or State University than white or Asian high school graduates, a smaller percentage of them actually enroll on a regular-admission basis, and over half of all Black and Hispanic students who attend the University and State University do so on a special-admission basis. At the same time, the percentage of Black and Hispanic Community College transfer students to the University and State University is lower than their percentages among the Community College population, and also lower than the percentage of Black and Hispanic first-time freshmen in the University and State University. For a variety of personal, academic, and financial reasons, the attrition rates for Black and Hispanic first-time freshmen and Community College transfer students in both segments are greater than among white and Asian students. Finally, a smaller percentage of students from these underrepresented ethnic minority groups actually persist and earn their baccalaureate degrees in five or more years.

These differences among the four major ethnic groups in the State are quite pronounced as Display 8 shows.

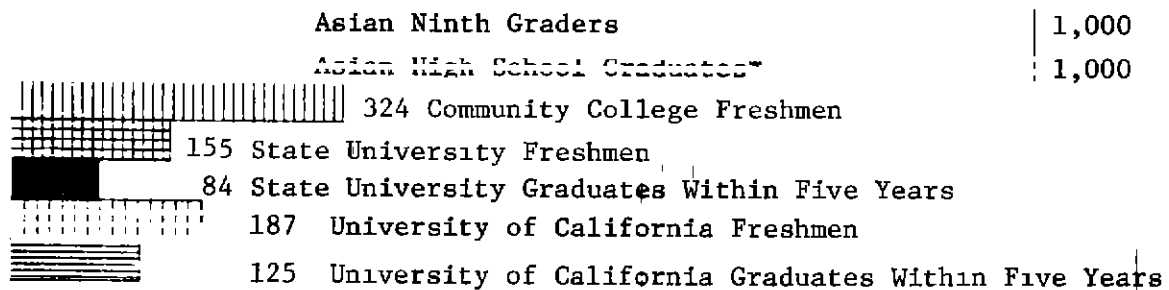
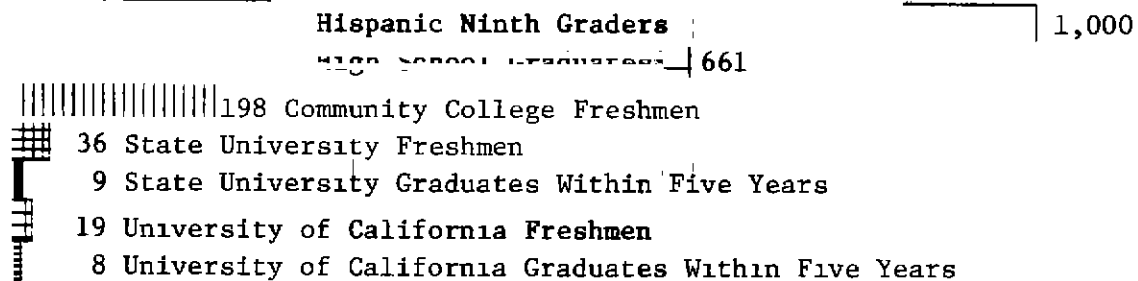
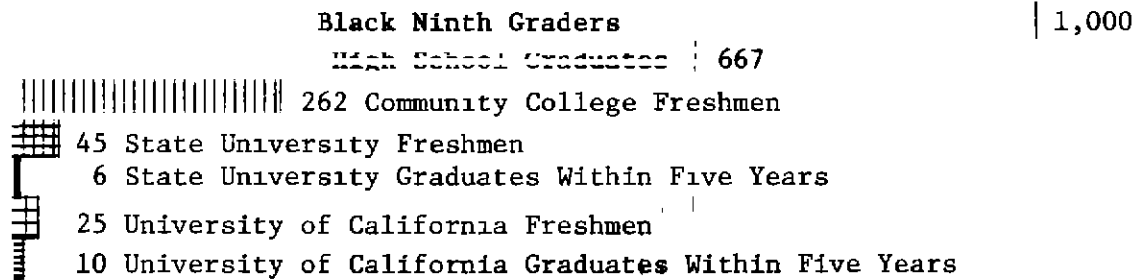
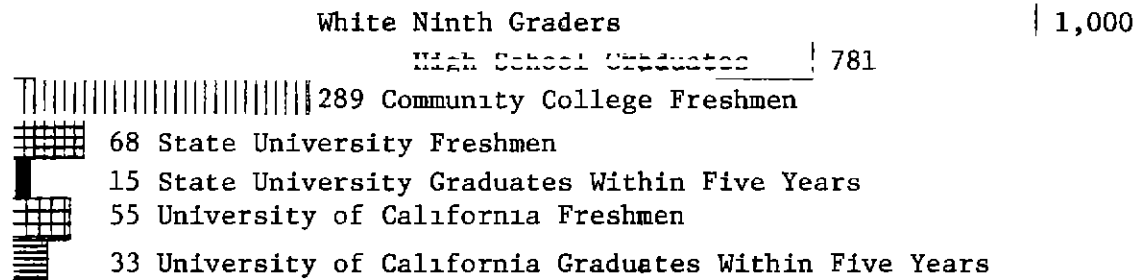
Retention and Graduation of White Students: As noted earlier and in Display 8, 781 out of every thousand white ninth graders in 1979-80 graduated from high school four years later in 1982-83, but the remaining 219 dropped out before graduation. Of the thousand, 129 were eligible for regular admission to the University, and 55 actually enrolled there. An additional 140 were eligible for regular admission to the State University but not the University, and 68 of these actually attended the State University. Another 289 enrolled initially in Community Colleges, and some later transferred to the University and to the State University.

Of the original thousand, 33 are likely to graduate from the University within five years, but only 15 will graduate from the State University in the same period of time. The greater attrition in the State University, the six or seven years it often takes its more heavily part-time undergraduates to earn their baccalaureate, and the large number of Community College transfer students there means that perhaps an additional 10 who began as freshmen and probably 20 to 25 who transferred from Community Colleges will also graduate from the State University.

Retention and Graduation of Black Students: Out of every thousand Black ninth grade students in 1979-80, just 667 graduated from high school in the class of 1983, and the remaining 333 dropped out of school. Of the thousand, just 24 were eligible for regular admission to the University. Approximately 11 enrolled there as regularly admitted students, and an additional 14 were granted special-admission status. Out of these 25 Black first-time freshmen, only 10 will graduate within five years; one more probably will graduate later; and the dozen others will drop out.

An additional 43 Black youth out of the original thousand were eligible under regular admission to attend the State University but not the University directly out of high school, and about 20 did so, along with 25 others who were granted special admission there. Among these 45, four of the regularly admitted Black students and two of those specially admitted students will graduate within five years, and several others will likely do so at some later time. Finally, 262 of the thousand Black students attended Community

**DISPLAY 8 Retention Rates of Ninth-Grade California Students  
Through the Bachelor's Degree, by Major Ethnic Group**



**Note:** Because of known in-migration of Asian students between ninth and twelfth grade, there were 1,174 Asian high school graduates in 1982-83 for every thousand ninth graders four years earlier. Figures for Asian college and university freshmen and graduates shown here are based on every thousand Asian high school graduates.

**Source:** California Postsecondary Education Commission staff analysis of California State Department of Education data on 1979-80 ninth graders and 1982-83 high school graduates, University of California and State University reports on retention and five-year graduation rates, and Commission data on postsecondary enrollments and degrees.

College the fall following graduation from high school, with some eventually transferring to the University and the State University, and perhaps half of these graduating.

Retention and Graduation of Hispanic Students: The retention and graduation pattern among Hispanic ninth graders in California is generally similar to that of Black students, with important variations. Out of every thousand who began the ninth grade in 1979-80, 661 graduated from high school with the class of 1983. This figure almost certainly overstates the high school graduation rate among Hispanics, because known immigration in the intervening years offset some attrition. In any event, of these 661 high school graduates, only 32 were eligible for regular admission to the University, and just 69 were eligible for regular admission to the State University.

In Fall 1983, a total of just 19 Hispanics out of every thousand who had been enrolled in the ninth grade four years earlier actually enrolled in the University, and only 36 attended the State University. In both instances, about half of these first-time freshmen enrolled on a special-admission basis. While more Hispanic than Black high school graduates thus attained eligibility for regular admission to the University, a smaller percentage of Hispanics actually enrolled.

Out of every thousand Hispanic ninth graders in 1979-80, 198 enrolled in a Community College in Fall 1983. Of these, some will probably eventually transfer to the University or the State University. Finally, out of the original thousand only eight will graduate from the University and nine from the State University within five years. Counting the few still enrolled in each segment after five years, perhaps three or four more may graduate eventually, meaning that scarcely 20 out of every 1,000 Hispanic ninth graders are likely to graduate from California's public four-year colleges and universities.

Retention and Graduation of Asian Students: The influx of large numbers of Asian immigrants between 1979-80 and 1982-83 makes it difficult to assess the levels of attrition and retention between ninth grade and high school graduation for this group. Out of every 1,000 Asian ninth graders in 1979-80, there were 1,174 Asian high school graduates four years later. Out of every 1,000 of these graduates, 269 were eligible for regular admission to the University and an additional 221 were eligible to attend the State University. Out of these, 187 actually enrolled as freshmen in the University, 155 in the State University, and 324 attended a Community College. Furthermore, out of the original 1,000 Asian students, 125 will graduate from the University and 84 will earn their degree from the State University within five years.

These figures suggest that today California confronts major questions of educational access and equity, and that the actions the State and its citizens take to respond to these questions will in large part shape California's future. These include:

- o In addition to the educational reform efforts already underway, what can be done to improve the education received by all Californians from kindergarten through the eighth grade to reduce the likelihood of dropouts and

assure that more young people are ready to undertake a demanding college-preparatory curriculum in high school?

- o What is being done and what other steps are needed in the high schools to better prepare all students for future roles as productive members of society, whether they go directly from high school graduation into the world of work or into a college or university?
- o How can the serious problem of high school dropouts be reduced, and what can be done to better motivate and prepare the diverse group of potential dropouts, ranging from low-income to affluent youth and from bright and bored students to those several grade levels behind their peers?
- o What can be done to increase the rate at which low-income and ethnic minority students attain eligibility for regular admission to the University and State University and enroll in postsecondary education, while at the same time assuring that they will be better prepared to complete the rigorous course work required for graduation from college?
- o How can the Community Colleges with their pool of high- and moderate-achieving students declining more than twice as fast as their already shrinking pool of first-time freshmen continue to prepare both these students and their increasingly large number of low-achieving students for eventual transfer to four-year institutions and for academic success after transfer?
- o What will happen to the State's public four-year institutions if the decline in transfer students in recent years erodes further in the years to come? What will this do to their balance between lower- and upper-division instruction and to their roles as envisioned under the Master Plan?
- o What are the root causes of the alarmingly high attrition among both regularly and specially admitted students in the State University, and what can be done to improve the retention and timely graduation rates of its undergraduates?
- o What are the consequences for both students and the State that so many of those who currently enroll in college drop out before completing their baccalaureate degrees?
- o Recognizing that achieving equal educational opportunity will never mean equalizing educational outcomes, which of the many programs that the State has undertaken over the past 20 years from early outreach to financial aid seem to be most effective in enhancing the preparation, participation, and subsequent performance of low-income and disadvantaged minority students in higher education? And finally, what more can be done to improve California's still unsatisfactory record of minority participation and achievement in high school as well as college?

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